INTRODUCTION TO COMPETION ANALYSIS

NATIONAL TRAINING WORKSHOP ON COMPETITION POLICY AND LAW

MALAWI
29TH – 31ST AUGUST, 2007

PRESENTATION
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1. Market Definition

The starting point in any type of competition analysis is the definition of the
"relevant" market. It is crucial to the analysis of potential anti-competitive effects that may originate either from business acts (e.g. mergers) that increase market concentration or from behavior by firms possessing market power. Defining relevant market is like specifying an area where anti-competitive practices are possible. It begins by assuming that anti-competitive conduct exists. It then proceeds to define the scope of the smallest market in which such conduct could be sustained. After defining the relevant market, the actual conduct in question is examined to determine whether it could have anti-competitive effect.

Market definition provides the means of identifying which products compete with one another. Identification of relevant markets enables us to pinpoints firms that compete to supply those products. This makes possible the determination whether, for example, an agreement is an agreement among competitors or whether an enterprise has a large market share (market power). Market shares are used as a basis for assessing whether a merger is likely to substantially lessen competition or not. They can be used to determine whether a firm is in a position to abuse dominance or whether vertical restraints can give rise to competition concerns.

Market definition includes considering whether products can technically serve the same purpose and whether they will do so in a cost effective manner for customers to consider them as close substitutes. Its scope is not always clear. For example, how should we treat colas? Do they belong to the market for cola-flavored drinks, the market for all cola flavored drinks, the market for ‘soft’ drinks, and the market for non alcoholic beverages? This implies that market shares will substantially vary with the way the market is defined.

The relevant market is defined as a product or group of products and geographic area in which it is sold such that a hypothetical, profit-maximizing firm that was the only seller of those products in that area could raise prices by a small but significant and non-transitory amount above prevailing levels. The relevant market has two dimensions namely the product market and the geographic market.

1.1 The Product Market

In order to define the relevant product market we take into account demand- and supply- side substitution.

Demand side substitution looks at the extent to which customers would switch among substitutes products in response to a change in relative prices or quality or availability or other features. In assessing demand side substitution, the views of competitors and customer are sought regarding which products they consider as substitute.

Supply side substitution assesses the extent to which suppliers of alternative products would switch their existing production facilities to make alternative products in response to a change in relative prices, demand or other market conditions.

Market definition starts by considering the narrowest market definition. This normally a product or service which one (or both) of the merging parties supply.

The hypothetical monopoly or SNIPP test (small, but significant non transitory increase in price) is used to identify which products to include in the relevant product market. The question to be asked is whether a monopoly supplier of these products would maximize its profits by consistently charging higher prices. If the hypothetical monopolist would be unable impose the higher price due to substitution by customers to other products, and then these products should be included in the relevant market until a point is reached where a hypothetical monopolist would maximize profits by maintaining prices above competitive levels.

In order to carry out the hypothetical monopoly test evidence on substitution patterns by customers between the parties' products and competing products is obtained. In determining substitutability the following information is useful:

- Evidence on the characteristics and usage of products and consumer preferences. Where objective characteristics of products and their intended uses are the same, this suggests that the products are close substitutes. However, switching costs and brand loyalty may affect substitution between products. In cases where switching cost is high and brand loyalty strong, care should be taken to avoid lumping products in the same market when they are not close substitutes.

- Ask customers about their past buying patterns, how they have responded to previous price increases and how they are likely to respond to a hypothetical price surge.
- Switching costs. High switching cost relative to the value of the product will make substitution less likely. The cost of substitution can be estimated by questing customers on any past experience of switching.
- Prices of substitute goods tend to be correlated and as such price correlation can be used to examine the degree of subtitutabilty between the products of merging parties and their competitors.
- Elasticity of demand/cross price of demand is also used to determine the extent of substitution between goods or the nature of demand for a product. If demand for a good is elastic then it means that it has close substitutes.

In assessing supply side substitution, potential suppliers are asked,

- How easily and without incurring significant sunk cost they can switch production in reaction to an increase in the price of substitutes.
- Whether substitution is technically possible.
- About the costs of switching production between products and the time it would take to switch production.
- Whether they can profitably switch production in response to 5-10 per cent increase in price.
- Whether they have spare capacity or are free and willing to switch production.

1.1 The Geographic Market

The geographic market is defined as an area within which reasonable substitution for the merging parties' products or firm suspected of possessing market power can take place. Geographic market may be local, regional, national, continental or international.

The aim of geographic market definition is to identify substitutes which are close that they would prevent a hypothetical monopolist of the product in one area from sustaining a price increase of at least 5-10 per cent. It starts by looking at the narrowest area. The hypothetical monopolist test is applied to this area and is repeated over a wider geographic area until the hypothetical monopolist would sustain a price hike of at least 5 to 10 per cent.

In defining geographic market, imports are taken into account. Imports can exert competitive pressure such that a market may be defined wider than the national. To determine the extent to which imports can influence the price of domestically produced goods, transport costs, tariff and non tariff barriers are assessed.

Additionally, in geographic market specification, the following factors are also considered:

- Transportation costs in relation to the value of the product are calculated. If transportation costs account for a small fraction of the total cost of the product, the customer would be willing to travel long distance in such of cheaper products and suppliers located in far flung areas.
- Distance that consumers are able and willing to travel. Geographic markets tend to be narrow for retail consumer products whereas for wholesaling and manufacturing markets customers may be able to switch between suppliers in different regions as long as transportation cost are not prohibitive.
- Language barriers may limit cross border trade.
- Regulatory and licensing requirements for some products e.g. chemicals may prevent easy importation and exportation of products and therefore geographic market would be national.

2. Market Structure and Concentration

2.1 Overview

After defining the relevant market, its structure is examined and how it is likely to be affected by the transaction being reviewed or how it likely to influence anti-competitive conduct being investigated.

Market shares, concentration ratios and the Herfindahl-Hirschman Index are used to assess market structure and concentration. These measures act as initial indicators or screens of possible competition concerns e.g. if a market has a small number of firms, the more likely the removal of an independent firm will present loss of an important competitive constraint on the remaining firms.

2.2 Market Shares

Market shares indicate the percentage of total sales of the product to be held by the merging firms and each of the rivals in the relevant market. They indicate the past market success of each firm. In the case of abuse of dominance, market share assists in assessing market power which is a necessary condition for abuse of dominance.

Combined market share of the merging parties and the increment in market shares arising from the merger are considered as useful screens for possible unilateral effects scenarios. The combined market shares are compared with those of other market players.

High market shares post merger are likely to raise competition concern issues. Generally mergers with an insignificant combined market share do not raise competition concern. Similarly, firms with low market shares are unlikely to abuse their positions. In the European Union, mergers are unlikely to raise competition concern if the combined market share is less than 25% whereas a 50 per cent market share or more may be indicative of the existence of dominant market position. In the Kenyan context, the law does not set market share threshold below which a merger may not be challenged or above which it can be challenged.

Changing market shares over relatively short period of time among the participants in a market may mean that no firm enjoys market power. To the contrary, high and rigid market shares over a long period of time may be suggestive of a situation of market power.

2.3 Concentration Ratios

These are computed by aggregating the market shares of the leading firms in a market. The concentration ratios show the proportion of the markets held in the hands of the largest firms. Normally the concentration ratios of the first three (CR3), four (CR4), five (CR5) or more firms are considered.

Concentration ratios can be used to classify market forms:

- Perfect competition, very low concentration ratio.
- Monopolistic competition, below 40% for the four-firm measurement.

- Oligopoly, above 40% for the four-firm measurement, (Example, automobile manufacturers).
- Monopoly, with a near-100% in the case of four-firm measurement.

Some jurisdictions regard the market concentrated if the CR4 is 60% or more of the market.

However one of the weaknesses of the concentration ratios is that they do not take account of variations in the relative size of the firms that make up the leading group. For example, a three firm concentration ratio of 90 per cent is consistent with the three firms having 35, 30 and 25 per cent of the market respectively or 85, 3 or 2 per cent: these competition structures are very different.

2.4 The Herfindahl Hirschman Index (HHI)

It is calculted by summing the squares of the market shares of all the firms operating in the market. It reflects both the number of firms in the merket and their relative size.

The HHI differs from the oncentration ratios in that it takes all firms in the industry into account no just the largest firms. Unlike the concentration ratiods, the HHI reflects both the distribution of the market shares of the top firms and the composition of the market outside the largest firms.

Both the absolute level and the change in HHI as a result of the merger provide an indication of whether a merger is likely to cause competition concern.

Change in HHI as result of a merger, is obtained by multiplying the product of the market shares of the parties to a merger deal by two (2ab). Alternatively it can be calculating by substracting the pre-merger HHI of a market from the post merger HHI.

In some jurisdictions, market concentration is categorised according to HHI as follows:

- Post merger HHI less than 1000 - not concentrated. Mergers resulting in unconcentrated markets are viewed as unlikely to have adverse effects on competition.
- Markets with post merger HHI of 1000-1800, moderately concentrated. Mergers that produce an increase of more than 100 points raise competition concern.
- Market with post merger HHI of 1800 and above highly concentrated/ concentrated. Mergers producing an increase of more than 50 points potentially raise significant competition concerns subject to unilateral and coordinated effects analysis.

One of the pitfalls of the HHI, especially in Jurisdictions where HHI levels act as ‘safe harbor’ for merger evaluation purposes, is that it does not take note of the following:

- The competitive advantage of parties to a merger.
- Cross ownership of firms in the relevant market.

3. Competitive Effects of Mergers

3.1 Overview

Other things being equal, market concentration affects the likelihood that one firm (unilateral effects), or a small group of firms (coordinated effects) could successfully exercise market power.

As stated elsewhere, market share and concentration data provide only the starting point for analyzing the competitive impact of a merger. In order to conclude that a merger is likely to substantially lessen competition, unilateral/coordinated effects likely to stem from the merger are considered. Both unilateral and coordinated effects lead to loss or reduction in consumer welfare.

3.2 Lessening of Competition through Unilateral Effects

Unilateral effects refer to a situation where the anti-competitive effects of a merger flow from non-coordinated action by market participants. They arise where, following the merger, the merging firms are able to exercise market power, for example by profitably raising price, reducing output or quality or variety as a result of the elimination of competition between the merging parties themselves.

In assessing unilateral effects the following factors are taken into account:

- Barriers to entry or expansion. High entry barriers encourage anti-competitive behavior whereas low barriers to entry deter anti-competitive conduct.
- Buyer power. Dominant buyers neutralize monopolistic abuse by pressuring sellers into keeping their price post-cost margins at competitive levels.
- Existence of alternative suppliers. If there are a sufficient number of suppliers to whom a significant number of buyers are willing to turn, the threat of losing these customers may be enough to place competitive constraint on the merging parties. However, this may not be the case in product markets differentiated by brand and reputation even when switching cost is low.
- Removal of an effective competitor. In assessing the effectiveness of a competitor, the following factors are considered: history of innovation; price leadership; use of aggressive pricing tactics; etc. The elimination of an effective competitor by means of a merger is likely to significantly affect competition negatively especially in concentrated markets.
- Control over inputs/natural resources or intellectual property rights. This enables a firm, post merger to have the ability and incentive to hinder expansion by competitors, or entry by new firms or even put its competitors at a cost disadvantage.

3.3 Lessening of Competition through Coordinated Effects

Coordinated effects arise where a merger reduces competitive constraints in a market, thus creating or strengthening the conditions that facilitate the ability of competitors to coordinate their competitive behavior. The main issue in coordinated effects analysis is whether the merger significantly increases the likelihood that firms in the market will successfully coordinate their behavior or strengthen existing coordination.

In order for coordination to take place successfully three conditions must me met in the market or be created by the merger:

- Identifying terms of coordination. Firms coordinating their behavior need not reach complex terms concerning price or output or market allocation but may instead reach an understanding on a common price, fixed price differentials, customer or market allocation

and stable market shares. The conditions that are conducive to reaching terms of coordination include:

  - Product or firm homogeneity. Homogeneous products and services facilitate price comparisons among other variables;
  - Market transparency. This refers to availability of information on firms' competitive offerings with regard to prices or the customers it serves. Availability of information of this nature makes coordination easier;
  - Existence of maverick firms. If one or more firms is a 'maverick', coordination may be difficult to sustain. If this sort of firm is one of the merger participants, the chances for coordinated interaction increase. Generally, similar cost structure of firms in the relevant market may lead to coordination; and
  - Cross-ownership of firms. This encourages collusion or exchange of information with respect to pricing and marketing strategies.

- Ability to detect and punish deviation. Punishment may take the form of price cut or output expansion. The following factors influence the ability to detect and punish cheating:
  - Market transparency;
  - Market stability. If aggregate and firm level demand in a particular market is stable and the market is mature, it will be relatively easy for firms to detect movements arising from a change in competitive behavior by another firm and act accordingly.
  - Cross-ownership of firms.

- Weak competitive constraints in a given market. Low competitive pressure coupled with high entry/expansion barriers favors collusive behavior by firms. Actual or potential competitive threat discourages coordination by firms.

4. MARKET ENTRY AND EXPANSION ANALYSIS

4.1 Overview

A merger is unlikely to create or enhance market power or facilitate its exercise, if entry into the market or expansion of output by existing firms is so easy that market players post-merger, either collectively or unilaterally could not profitably maintain a price or sustain a price increase above

competitive levels. Such entry likely will prevent or counteract anti-competitive behavior by the merging parties or their competitors.

There are two types of entry – committed and uncommitted entry. Committed entry refers to entry or expansion that requires significant sunk costs and occurring within the foreseeable future. Uncommitted entry occurs quickly and without any significant sunk cost.

Mergers that take place in market where entry is easy (uncommitted) do not raise competition concern. However, in markets where entry involves significant sunk costs of entry and exit mergers are likely to cause competition concern.

This presentation is concerned with entry that requires significant sunk costs. In order to conclude that such entry is a real competitive constraint on the merging parties or dominant firm it must meet three conditions: timeliness, likelihood and sufficiency.

4.2 Timeliness of Entry

If entry is to be regarded as a competitive constraint it must be sufficiently timely i.e. it must occur within two years.

4.3 Likelihood of Entry

Entry is likely to take place if it would be profitable. In assessing the probability of entry, the following factors are considered:

- Structural barriers, arising from market conditions such as cost, demand and technology.
- Government regulations e.g. licensing, intellectual property rights, etc. may limit market participation or impose substantial approval costs.
- Economies of scale may deter entry in that only large scale entry would be profitable. Information on the minimum viable scale needed to profitably enter the market may be useful in assessing to what extent economies of scale may be an entry barrier.
- Strategic advantages, where existing established position of the incumbent gives it advantage over new entrants or where existing suppliers aggressively respond to new entry by engaging in marketing blitz. All this helps to limit entry.
- Record of firms entering and leaving the market.
- Market dynamics.

4.4 Sufficiency of Entry

Anticipated entry should be of a nature, scale and scope capable of counteracting the anticompetitive effects of a merger.

5. Efficiencies

Efficiencies refer to cost savings/benefits that arise as a result of a merger or vertical arrangements. Mergers have the capacity to bring about significant efficiencies by allowing better utilization of existing assets, enabling the merged entity to attain lower costs than either firm could have achieved alone.

Efficiencies may lead to lower prices, better quality, enhanced service or introduction of new products thus increasing the ability and incentive of the merged entity to compete. For Example, merger generated efficiencies may enhance competition by permitting two ineffective competitors to become one effective competitor. In coordinated effects context, marginal cost reductions may make coordination less likely by creating a new maverick firm. In unilateral effects context, marginal cost reduction may lower the merged firms incentive to increase price.

In jurisdictions where consumer welfare is the goal of competition policy, only those efficiencies that are likely to lead to lower prices are taken into account in the evaluation. If merger review has collective welfare as its objective, producer efficiencies are also considered.

Experience in some countries has shown that efficiencies resulting from shifting production among facilities formerly owned separately are more verifiable, merger specific and are less likely to result from restrictive reductions in output which leads to lower marginal cost of production. Efficiencies originating from research and development are not easy to verify and may result from anticompetitive reductions in output. Others may not be merger specific like those relating to procurement, management and capital cost and they can be achieved without the merger.

6. Structural versus Behavioral Issues

Structural issues are issues related to market structure. Market structure refers to the characteristics of a market viz. number of sellers and buyers, nature of the product, entry

and exit barriers among others. The four types of market structure are perfect competition, monopolistic competition, oligopoly and monopoly in case of a single producer or monopsony in case of single buyers.

Behavioral issues refer to conduct by firms unilaterally or collectively that may be anti-competitive. Such anti-competitive practices include predatory conduct, price discrimination, bundling, refusal to supply and exclusive distribution in context of single firms. Examples of coordinated conduct include collusive tendering, price and output fixing and market sharing.

Market structure may prevent or facilitate anti-competitive behavior by firms individually and collectively. For example, having a monopoly in a market may favor abuse of dominance. However dominance per se is not a problem, what is bad is its misuse.

Competition problems arising from market structure can be solved by structural remedies whereas those from behavior can be resolved by behavioral remedies.

Remedies are measures aimed at addressing the identified competitive harm of a merger that significantly affects market structure.

Structural remedies involve divestiture of a business or asset. Behavioral remedies refer to remedies of access or prohibitions of certain business practices.

Structural remedies are preferable because divestitures have a) clear cut scope; b) provide a straightforward solution to the competition problem i.e. elimination of overlap and reduction in market share; c) easy to enforce and they do not require ongoing monitoring.

Behavioral remedies are a) difficult to craft; b) may be circumvented; c) require ongoing monitoring.

Behavioral remedies are appropriate where a) divestiture is not viable; b) competitive detriments are expected to be limited in duration because of fast changing technology; c) there is need to preserve the advantages of a merger. It is paramount to ensure that monitoring and enforcement can be done.

The risks to consider in designing divestitures:

- Purchaser risks: a suitable buyer may not be easy to find or merging firms may deliberately wish to sell to a weak or inappropriate firm.
- Asset risks: competitive capability of a divestiture package may decline significantly prior to completion of a divestment through loss of customers or critical members of staff.
- Composition risks: the extent of divestiture package may not be appropriately arranged purchaser to allow a suitable buyer to operate efficiently.

Behavioral remedies run the risk of distorting the market especially if they involve price intervention.

End.